WHAT IS CLAIMED AND DESIRED TO BE SECURED BY LETTERS PATENT OF THE UNITED STATES IS:

1. An antenna integrity check device, comprising:

a measurement device configured to determine at least one value of an antenna;

at least one electronic device connectable to the antenna; and

a controller configured to prevent operation of the electronic device based on the determined antenna value.

2. The antenna according to Claim 1, wherein said controller is a logic gate that turns off the electronic device if the determined antenna value is outside a predetermined range.

3. The antenna integrity check device according to Claim 1, wherein:

said measurement device comprises,

a voltage source connected to the antenna, and

a current measurement device connected in series with the voltage source and the antenna.

4. The antenna integrity check device according to Claim 1, wherein:

said measurement device comprises,

a current source connected to the antenna, and

a voltage detector configured to determine a voltage at a point in parallel with the current source and the antenna.

5. The antenna integrity check device according to Claim 1, wherein:

said measurement device comprises,

a resonant frequency detector configured to determine a resonant frequency of the antenna.

6. The antenna integrity device according to Claim 1, wherein:

said measurement device comprises,

a challenge mechanism configured to send a challenge to the antenna, and

a response mechanism configured to receive and decode a response received from the antenna.

7. The antenna integrity device according to Claim 6, wherein said challenge mechanism is an information request, and the response is the determined antenna value.

8. The antenna integrity device according to Claim 6, wherein:

said challenge mechanism is further configured to send an encrypted key to the antenna; and

said response mechanism is further configured to decode the response based on the key.

9. The antenna integrity device according to Claim 1, wherein said controller indexes a lookup table of antenna properties with the determined antenna value.

10. The antenna integrity device according to Claim 1, wherein said controller adjusts a power output of a transmitter attached to the antenna based on the determined antenna value.

11. The antenna integrity device according to Claim 1, wherein the antenna is connected to said at least one electronic device and said measurement device via the same physical connectors.

12. The antenna integrity device according to Claim 11, wherein the same physical connectors transmit each of RF signals, information signaling, and DC power.

13. The antenna integrity device according to Claim 4, wherein:

the antenna is connected to said at least one electronic device via a single pin connection and ground; and

the DC Current source is also connected to the antenna via the single pin connection and ground, such that said single pin connection carries both RF signals from the at least one electronic device to the antenna and DC current from the measurement device to the antenna.

14. The antenna integrity device according to Claim 1, wherein said measurement device is configured to read the antenna value from a set of pins connected to the antenna.

15. The antenna integrity device according to Claim 14, wherein said pins are shorted or open at the antenna, the antenna value comprising a binary pattern based on a pin being open or shorted.

16. The antenna integrity device according to Claim 1, further comprising:

a set of at least one status light connected to said controller;

wherein said controller sets the status light according to a current operational status of the electronic device attached to said antenna.

17. The antenna integrity check device according to Claim 1, further comprising a programmable memory device connected to said controller and configured to store programs and data related to testing integrity of the antenna and other functions of the at least one electronic device connected to the antenna.

18. The antenna integrity check device according to Claim 17, further comprising:

a communications port coupled to said controller;

wherein said controller is configured to download programs from said communications port and store the downloaded programs and data in said programmable memory device.

19. An antenna, comprising:

an RF input pin;

at least one antenna element connected to the RF input pin; and

at least one electronic component connected to the RF input pin, said electronic component being configured to identify at least one property of the antenna.

20. The antenna according to Claim 19, wherein said at least one electronic component is a resistor having a value related to said at least one property of the antenna.

21. The antenna according to Claim 19, wherein said at least one electronic component is a circuit having a resonant frequency related to said at least one property of the antenna.

22. The antenna according to Claim 19, wherein said at least one electronic component is a microchip configured to transmit a value related to antenna properties via the RF input pin.

23. The antenna according to Claim 19, wherein said at least one electronic component is a microchip configured send a challenge response in response to a challenge, said challenge response including a value related to said at least one property of the antenna.

24. The antenna according to Claim 19, wherein said at least one electronic component is located in a location that it cannot be easily removed or modified.

25. The antenna according to Claim 19, wherein said at least one electronic component is substantially surrounded by said at least one antenna element.

26. The antenna according to Claim 19, wherein said at least one electronic component is embedded within a substrate holding said at least one antenna element.

27. The antenna according to Claim 26, wherein said at least one electronic component is substantially surrounded by said at least one antenna element.

28. The antenna according to Claim 19, further comprising:

a ground pin;

wherein:

said at least one antenna element comprises a first antenna element connected to said RF input pin and a second antenna element connected to said ground pin; and

said at least one electronic component is connected between said RF pin and said ground pin.

29. The antenna according to Claim 28, further comprising:

a substrate having first and second surfaces, the first antenna element disposed on the first surface and the second antenna element is disposed on the second surface.

30. The antenna according to Claim 29, wherein said at least one electronic component is disposed between the first antenna element and the second antenna element and within said substrate.

31. The antenna according to Claim 28, wherein said antenna is a 5 GHz connectorized antenna.

32. The antenna according to Claim 19, wherein said antenna is a dual element planar antenna.

33. An antenna, comprising:

a set of data pins and an RF input pin;

at least one antenna element connected to the RF input pin; and

a series of shorts and opens connected to a set of data pins.

34. The antenna according to Claim 33, wherein said shorts comprise grounded pins and said opens comprise pins which are not grounded.

35. The antenna according to Claim 33, wherein said shorts comprise grounded pins and said opens comprise pins connected to a voltage source.

36. The antenna according to Claim 33, wherein said antenna is a dual element planar antenna.

37. An antenna, comprising:

a set of input pins and an RF input pin;

at least one antenna element connected to the RF input pin; and

at least one electronic component connected to the set of input pins;

wherein said at least one electronic component has a value related to at least one property of the antenna.

38. The antenna according to Claim 37, wherein said electronic component is a microchip configured to transmit at least a value related to at least one property of the antenna.

39. The antenna according to Claim 37, wherein said at least one electronic component is a circuit having a resonant frequency that identifies at least one property of the antenna.

40. The antenna according to Claim 37, wherein said at least one electronic component is a resistor having a resistance value that identifies at least one property of the antenna.

41. The antenna according to Claim 37, wherein said at least one electronic component is an active circuit powered from a source connected to one of the input pins.

42. The antenna according to Claim 37, wherein said antenna is a dual element planar antenna.

33 44. A method of checking integrity of an antenna, comprising the steps of:

determining at least one property of the antenna;

enabling an electronic device connected to the antenna if the antenna property is within a valid range.

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45. The method according to Claim 44, wherein:

said step of determining comprises the steps of,

applying a current source to the antenna,

measuring a voltage produced by the current source and the antenna, and

comparing the measured voltage to a valid voltage representing said at least one property of the antenna.

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46. The method according to Claim 45, wherein:

said step of comparing the measured voltage comprises indexing a table of antenna properties with the measured voltage to retrieve said at least one property of the antenna.

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47. The method according to Claim 44, wherein:

said step of determining comprises the steps of,

applying a voltage source to the antenna,

measuring a current produced by the voltage source and the antenna, and

comparing the measured current to a valid current representing said at least one property of the antenna.

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48. The method according to Claim 44, wherein:

said step of determining comprises the steps of,

applying a test signal to the antenna,

measuring a resonant frequency of the circuitry on the antenna, and

comparing the measured resonant frequency to a valid resonant frequency representing said at least one property of the antenna.

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~~49~~. The method according to Claim 48, wherein:

said step of comparing the measured resonant frequency comprises indexing a table of antenna properties with the measured resonant frequency to retrieve said at least one property of the antenna.

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~~50~~. The method according to Claim 44, wherein:

said step of determining comprises the steps of,

sending an antenna properties request to the antenna,

retrieving an antenna properties response, and

comparing the antenna properties response to valid antenna properties.

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~~51~~. The method according to Claim 50, wherein:

said step of sending an antenna properties request comprises sending a secure challenge to the antenna; and

said step of retrieving comprises decoding a challenge response sent from the antenna.

52. The method according to Claim 51, wherein said decoded challenge response identifies said at least one property of the antenna.

53. The method according to Claim 51, wherein said decoding comprises decoding challenge text in said challenge response, said challenge text having been transmitted in said challenge, and said challenge text having been manipulated by circuitry on the antenna.

54. The method according to Claim 44, wherein said step of determining at least one property of the antenna comprises reading an encoded pattern on a set of pins attached to said antenna.

55. The method according to Claim 54, wherein said pattern is a pattern of shorts and opens applied to said pins.

56. The method according to Claim 44, wherein said step of determining at least one property of the antenna comprises

determining properties of an analog circuit disposed on the antenna that identify said at least one property of the antenna.

57. The method according to Claim 44, wherein said step of determining at least one property of the antenna comprises reading digital signaling transmitted from the antenna that identifies said at least one property.

58. The method according to Claim 44, wherein:

said method is embodied in a set of computer instructions stored on a computer readable media;

said computer instructions, when loaded into a computer, cause the computer to perform the steps of said method.

59. The method according to Claim 58, wherein said computer instruction are compiled computer instructions stored as an executable program on said computer readable media.

60. The method according to Claim 59, wherein said antenna is a dual element planar antenna.

61. A method of manufacturing an antenna, comprising the steps of:

preparing a substrate;

disposing at least one antenna element on the substrate;

attaching a connector to said at least one antenna element;

inserting at least one electronic component on the substrate in a location where it is not easily removed or modified.

62. The method according to Claim 61, wherein said location is surrounded by said at least one antenna element.

63. The method according to Claim 61, wherein said location is embedded in said substrate.

64. The method according to Claim 61, wherein said electronic component is one of a resistor having a value selected to identify properties of the antenna, an resonant circuit having a resonant frequency that identifies properties of the antenna, and a microchip configured to transmit properties of the antenna.

65. The method according to Claim 61, wherein said antenna is a dual element planar antenna.